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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,446	11/12/2003	William A. Fotino	26512-501	8001

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EXAMINER
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FERGUSON, MICHAEL P

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/706,446

Applicant(s)


FOTINO ET AL.

Examiner

Michael P. Ferguson

Art Unit

3679



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/30/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-8, 11-13, 16-18 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kincaid et al. (US 6,076,840).

As to claims 1-3 and 21, Kincaid et al. disclose a ball joint assembly comprising a ball stud **52'** having a spherical surface **56'** to be received by a ball socket, a threaded portion **82'** having a thread diameter for being received by a corresponding fastener, and a wrench flat **58** having a deck height for receiving a tool to restrain the ball stud (Figures 2 and 4).

Kincaid et al. fail to disclose a ball joint assembly comprising a ball stud having a threaded portion having about an 8 mm or 5/16" thread diameter and a wrench flat having a deck height between about 4.50 mm and 6.50 mm

The applicant is reminded that a change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a ball joint assembly as disclosed by Kincaid et al. to have a ball stud having a threaded portion having about an 8 mm or 5/16" thread diameter and a wrench flat having a deck height between about

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4.50 mm and 6.50 mm as such practice is a design consideration within the skill of the art.

As to claims 6-8, 22 and 25, Kincaid et al. disclose a motor vehicle having a ball joint assembly comprising a ball stud **52'** having a spherical surface **56'** to be received by a ball socket, a threaded portion **82'** having a thread diameter for being received by a corresponding fastener, and a wrench flat **58** having a deck height for receiving a tool to restrain the ball stud (Figures 2 and 4).

Kincaid et al. fail to disclose a motor vehicle having a ball joint assembly comprising a ball stud having a threaded portion having about an 10 mm or 3/8" thread diameter and a wrench flat having a deck height between about 5.00 mm and 8.00 mm

The applicant is reminded that a change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a motor vehicle as disclosed by Kincaid et al. to have a ball stud having a threaded portion having about an 10 mm or 3/8" thread diameter and a wrench flat having a deck height between about 5.00 mm and 8.00 mm as such practice is a design consideration within the skill of the art.

As to claims 11-13, 23 and 26, Kincaid et al. disclose a motor vehicle having a ball joint assembly comprising a ball stud **52'** having a spherical surface **56'** to be received by a ball socket, a threaded portion **82'** having about a thread diameter for being received by a corresponding fastener, and a wrench flat **58** having a deck height for receiving a tool to restrain the ball stud (Figures 2 and 4).

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Kincaid et al. fail to disclose a motor vehicle having a ball joint assembly comprising a ball stud having a threaded portion having about an 12 mm or 7/16" thread diameter and a wrench flat having a deck height between about 6.00 mm and 9.00 mm

The applicant is reminded that a change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a motor vehicle as disclosed by Kincaid et al. to have a ball stud having a threaded portion having about an 12 mm or 7/16" thread diameter and a wrench flat having a deck height between about 6.00 mm and 9.00 mm as such practice is a design consideration within the skill of the art.

As to claims 16-18, 24 and 27, Kincaid et al. disclose a motor vehicle having a ball joint assembly comprising a ball stud **52'** having a spherical surface **56'** to be received by a ball socket, a threaded portion **82'** having a thread diameter for being received by a corresponding fastener, and a wrench flat **58** having a deck height for receiving a tool to restrain the ball stud (Figures 2 and 4).

Kincaid et al. fail to disclose a motor vehicle having a ball joint assembly comprising a ball stud having a threaded portion having about a 14mm, 1/2", or 9/16" thread diameter and a wrench flat having a deck height between about 6.00 mm and 10.00 mm

The applicant is reminded that a change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). Accordingly, it would have been obvious to one having ordinary skill

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in the art at the time the invention was made to modify a motor vehicle as disclosed by Kincaid et al. to have a ball stud having a threaded portion having about a 14mm, 1/2", or 9/16" thread diameter and a wrench flat having a deck height between about 6.00 mm and 10.00 mm as such practice is a design consideration within the skill of the art.

3. Claims 4, 5, 9, 10, 14, 15, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kincaid et al. in view of Kincaid et al.<sub>2</sub> (US 6,604,270).

As to claim 4, Kincaid et al. fail to disclose a ball stud comprising an upper tool receiving portion positioned at the tip of the ball stud.

Kincaid et al.<sub>2</sub> teach a ball stud **48** comprising an upper tool receiving portion positioned at the tip of the ball stud comprising an inner hex receiving portion; the upper tool receiving portion enabling one to easily restrain the ball stud while tightening a nut onto the ball stud (Figures 2 and 3). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a ball stud as disclosed by Kincaid et al. to have an upper tool receiving portion as taught by Kincaid et al.<sub>2</sub> in order to provide for versatility in tightening a nut onto the ball stud as the ball stud may be restrained using either the wrench flat or the upper tool receiving portion, which ever is more easily accessible.

As to claim 5, Kincaid et al.<sub>2</sub> teach a ball stud wherein the upper tool receiving portion comprises an outer or inner hex receiving portion (Figure 2).

As to claim 9, Kincaid et al. fail to disclose a ball stud comprising an upper tool receiving portion.

Kincaid et al.<sub>2</sub> teach a ball stud **48** comprising an upper tool receiving portion comprising an inner hex receiving portion; the upper tool receiving portion enabling one to easily restrain the ball stud while tightening a nut onto the ball stud (Figures 2 and 3). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a ball stud as disclosed by Kincaid et al. to have an upper tool receiving portion as taught by Kincaid et al.<sub>2</sub> in order to provide for versatility in tightening a nut onto the ball stud as the ball stud may be restrained using either the wrench flat or the upper tool receiving portion, which ever is more easily accessible.

As to claim 10, Kincaid et al.<sub>2</sub> teach a ball stud wherein the upper tool receiving portion comprises an outer or inner hex receiving portion (Figure 2).

As to claim 14, Kincaid et al. fail to disclose a ball stud comprising an upper tool receiving portion.

Kincaid et al.<sub>2</sub> teach a ball stud **48** comprising an upper tool receiving portion comprising an inner hex receiving portion; the upper tool receiving portion enabling one to easily restrain the ball stud while tightening a nut onto the ball stud (Figures 2 and 3). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a ball stud as disclosed by Kincaid et al. to have an upper tool receiving portion as taught by Kincaid et al.<sub>2</sub> in order to provide for versatility in tightening a nut onto the ball stud as the ball stud may be restrained using either the wrench flat or the upper tool receiving portion, which ever is more easily accessible.

As to claim 15, Kincaid et al.<sub>2</sub> teach a ball stud wherein the upper tool receiving portion comprises an outer or inner hex receiving portion (Figure 2).

As to claim 19, Kincaid et al. fail to disclose a ball stud comprising an upper tool receiving portion.

Kincaid et al.<sub>2</sub> teach a ball stud **48** comprising an upper tool receiving portion comprising an inner hex receiving portion; the upper tool receiving portion enabling one to easily restrain the ball stud while tightening a nut onto the ball stud (Figures 2 and 3). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a ball stud as disclosed by Kincaid et al. to have an upper tool receiving portion as taught by Kincaid et al.<sub>2</sub> in order to provide for versatility in tightening a nut onto the ball stud as the ball stud may be restrained using either the wrench flat or the upper tool receiving portion, which ever is more easily accessible.

As to claim 20, Kincaid et al.<sub>2</sub> teach a ball stud wherein the upper tool receiving portion comprises an outer or inner hex receiving portion (Figure 2).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to ball joint assemblies:

Teramachi et al. (US 5,653,547), Schütt et al. (US 5,611,635) and Kidokoro (US 5,011,321) are cited for pertaining to ball studs comprising a wrench flat.



Yagyu (US 6,739,789) and Sugita et al. (US 5,489,161) are cited for pertaining to ball studs comprising an upper tool receiving portion.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (703)308-8591. The examiner can normally be reached on M-F (7:30-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703)308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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